

# LYME DISEASE

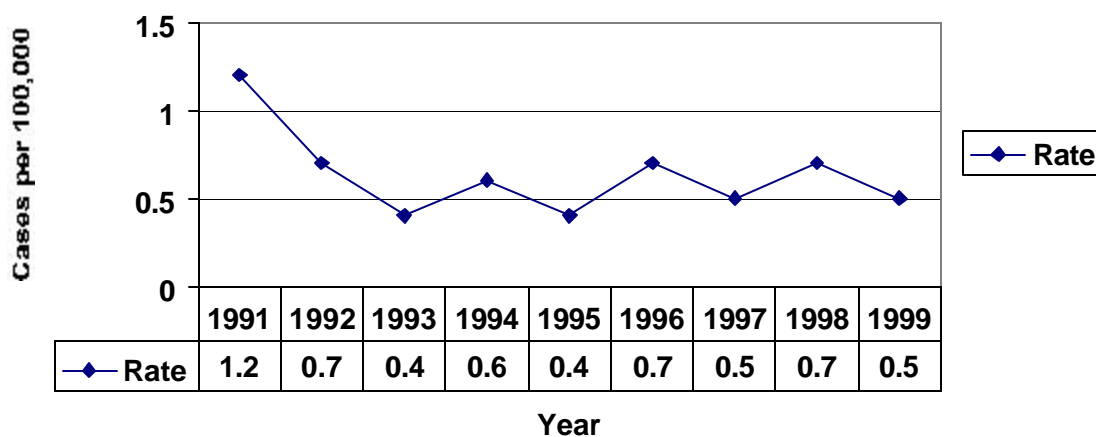
Lyme disease, caused by the spirochete *Borrelia burgdorferi*, is transmitted by the bite of *Ixodes* ticks. The acute phase of the illness is characterized by an erythema migrans (EM), a red circular patch that usually appears 3 days to 1 month after the bite of an infected tick, at the site of the bite, and is accompanied by mild systemic symptoms. The chronic phase may occur within weeks to months after the initial infection and consists of arthritic, cardiac, or neurologic manifestations.

## Laboratory Criteria for Confirmation:

- Isolation of *B. burgdorferi* from a clinical specimen, **OR**
- Demonstration of diagnostic IgM or IgG antibodies to *B. burgdorferi* in serum or CSF. A two-step testing approach using a sensitive enzyme immunoassay (EIA) or immunofluorescent assay (IFA) followed by Western Blot is required.

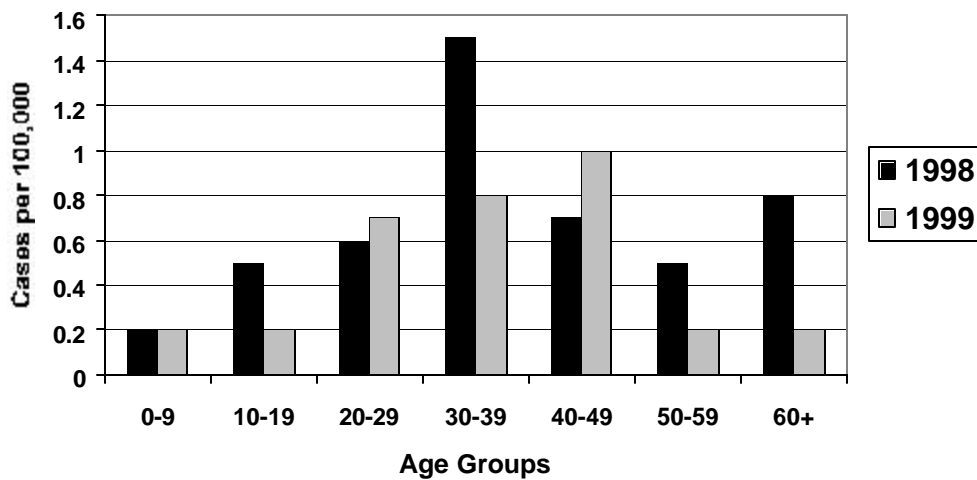
Kentucky Case Definition: Physician-diagnosed erythema migrans  $\geq 5$  cm in diameter, **OR** at least one late stage manifestation **AND** laboratory confirmation of infection. (See complete case definition on back of the CDC Lyme Disease Report Form in the Appendix).

## Lyme Disease Incidence, Kentucky 1991-1999

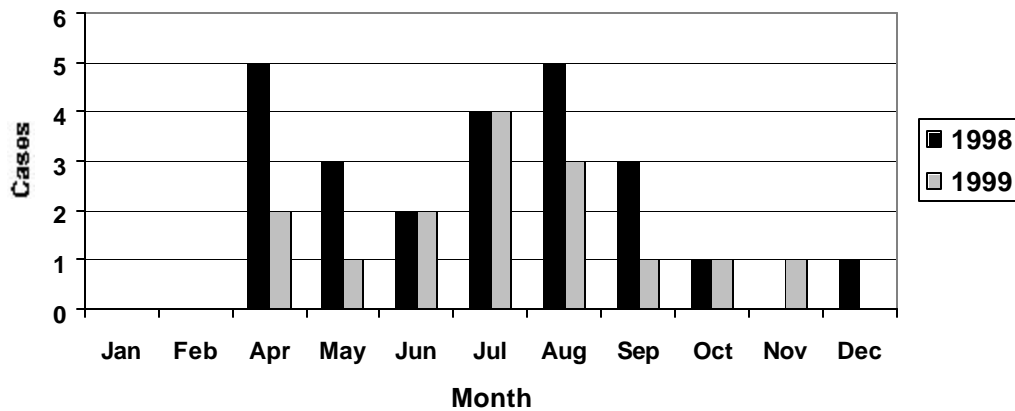


	<b>1998</b>	<b>1999</b>
Number of Cases	27	19
Rate per 100,000	0.7	0.5
Rate by Gender		
Female	0.5	0.5
Male	0.9	0.5

### Lyme Disease, Age-Specific Incidence Kentucky, 1998-1999



### Lyme Disease, Reported Cases by Month of Onset Kentucky, 1998-1999

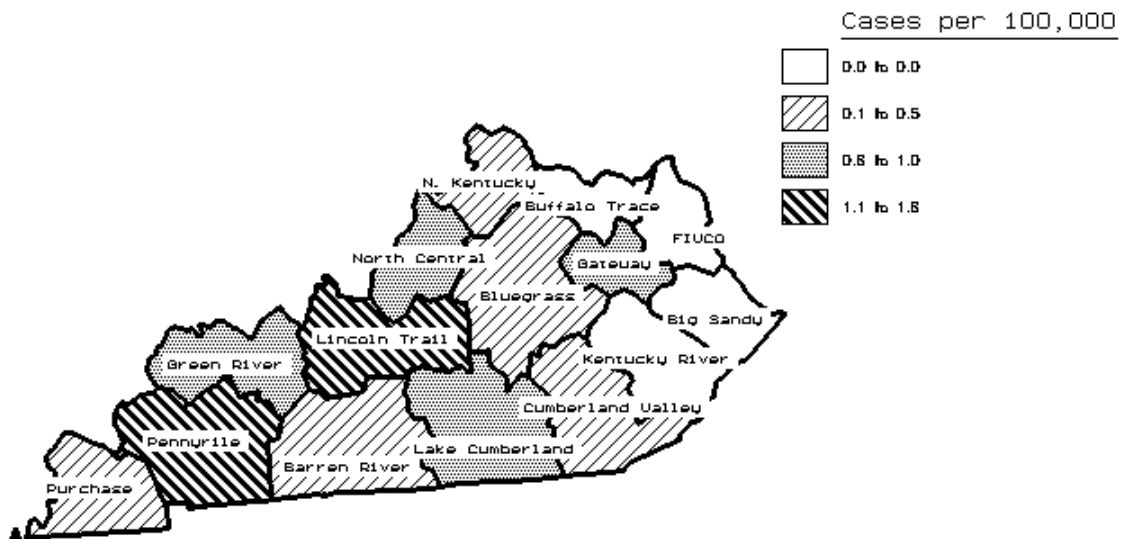


In **1998** a total of 85 case reports were received. Twenty-seven were confirmed, 4 were probable, and 54 were not cases.

In **1999** a total of 81 case reports were received, 19 were confirmed, 1 was a probable, 10 were suspects, and 51 were not cases.

In both years many case reports could not be considered because the correct sequence of tests was not used, or only a single laboratory result was received with no history of symptoms. Follow-up attempts with the health care provider often fail to obtain the needed information.

### **Lyme Disease by District, Kentucky Average Annual Incidence, 1998-1999**



The Big Sandy, Buffalo Trace, Fivco, and Kentucky River Districts reported no cases over the two year period. The Pennyriple District reported the highest average annual incidence of 1.6 cases per 100,000, followed by the Lincoln Trail District with a rate of 1.5 per 100,000.